



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,415	02/28/2002	Atsushi Isozaki	111925	8710
25944 75	90 05/18/2006		EXAMINER	
OLIFF & BERRIDGE, PLC			GRANT II, JEROME	
P.O. BOX 19928 ALEXANDRIA, VA 22320			ART UNIT	PAPER NUMBER
	., 111 22320		2625	

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)
· 	10/084,415	ISOZAKI ET AL.
Office Action Summary	Examiner	Art Unit
	Jerome Grant II	2626
The MAILING DATE of this communication appeared for Reply	ppears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perior  - Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO  1.136(a). In no event, however, may a reply be ti  d will apply and will expire SIX (6) MONTHS fron ute, cause the application to become ABANDONI	N. mely filed  n the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on  2a) ☐ This action is <b>FINAL</b> . 2b) ☐ Th  3) ☐ Since this application is in condition for allow closed in accordance with the practice under	is action is non-final. ance except for formal matters, pr	
Disposition of Claims		
4) ⊠ Claim(s) <u>1-17</u> is/are pending in the application 4a) Of the above claim(s) is/are withdrest 5) ⊠ Claim(s) <u>10-17</u> is/are allowed.  6) ⊠ Claim(s) <u>1,5 and 6</u> is/are rejected.  7) ⊠ Claim(s) <u>2-4 and 7-9</u> is/are objected to.  8) □ Claim(s) are subject to restriction and the subject to restrict the subjec	awn from consideration.	
Application Papers		
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) acceptable and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examin 11.	ecepted or b) objected to by the e drawing(s) be held in abeyance. Se ection is required if the drawing(s) is objected.	ee 37 CFR 1.85(a). Djected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureattached detailed Office action for a list	nts have been received. nts have been received in Applicat fority documents have been receiv au (PCT Rule 17.2(a)).	tion No red in this National Stage
Attachment(s)  1)  Notice of References Cited (PTO-892)	4) ☐ Interview Summary	PRIMARY EXAMINER
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 2-2002.</li> </ul>	Paper No(s)/Mail D	



Application/Control Number: 10/084,415

Art Unit: 2626

## **Detailed Action**

1.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Funahashi.

With respect to claim 1, Funahashi teaches a gear changing device as shown by figure 1, comprising: a drive motor 102 according to col. 10, lines 58-60 for movement in a forward and reverse direction; sun gear 105 as claimed; a planetary gear 106 as claimed; a rotating member (107 or 109{1-3}) that is concentric with the sun gear and rotates in the manner claimed. Funahashi teaches the rotating member stops rotating when the sun gear rotates in the reverse direction according col. 2, lines 55-62 see also the locking mechanism. Col. 10, lies 50-66 and col. 7, lines 18-20 teach the lock mechanism for the rotating member when the sun gear is in a reverse direction. Note that gear 107 has recessed members with the limitations as claimed; a plurality of transmission gears 109(1-4) that are engaged with the planetary gear at the predetermined positions on the path of the planetary gear and the sensor switch 111(1-2) that detects the rotation of the sun gear with respect to a fixed position.

Application/Control Number: 10/084,415

Art Unit: 2626

With respect to claim 5, Funahashi teaches wherein the gear changing device is for use in a film camera apparatus, according to col. 5, lines 1-5, that requires switching from a plurality of modes (reverse and forward motion of the motors and gears).

2.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo in view of Funahashi.

With respect to claim 6, Kondo teaches a fax as a communication apparatus with operating modes of transmission and receiving with respect to the transmission gears.

Kondo fails to teach the specifics of the gears and its inter-workings as claimed. However, Funahashi teaches these limitations.

Funahashi teaches a gear changing device as shown by figure 1, comprising: a drive motor 102 according to col. 10, lines 58-60 for movement in a forward and reverse direction; sun gear 105 as claimed; a planetary gear 106 as claimed; a rotating member (107 or 109{1-3}) that is concentric with the sun gear and rotates in the manner

Application/Control Number: 10/084,415

Art Unit: 2626

(107 or 109{1-3}) that is concentric with the sun gear and rotates in the manner claimed. Funahashi teaches the rotating member stops rotating when the sun gear rotates in the reverse direction according col. 2, lines 55-62 see also the locking mechanism. Col. 10, lies 50-66 and col. 7, lines 18-20 teach the lock mechanism for the rotating member when the sun gear is in a reverse direction. Note that gear 107 has recessed members with the limitations as claimed; a plurality of transmission gears 109(1-4) that are engaged with the planetary gear at the predetermined positions on the path of the planetary gear and the sensor switch 111(1-2) that detects the rotation of the sun gear with respect to a fixed position.

Since both Kondo and Funahashi utilized gear assemblies for performing work, the purpose of the specific gear assemble as recited in the claim and taught by Funahashi would have been recognized by Kondo.

It would have been obvious to replace at least one set of sun and planetary gears and a rotating member of Kondo with a rotating member, sun and planetary gears, set forth by Funahashi for the purpose of allowing the gears to operating with different modes of operation of the communication apparatus, as taught by the communication apparatus of Kondo where a (fax transmission, reception, and copying operation are performed).

Page 5

Application/Control Number: 10/084,415

Art Unit: 2626

## 3. Claims Objected to As Containing Allowable Matter

Claims 2-4, 7-9 and 11-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## 4. Allowed Claims

Claim 10 is allowed for the reason the prior art does not teach or suggest, "...
wherein the communication apparatus selects a predetermined number of at
least one position from the plurality of the positions on the path of the planetary
gear with the regulating unit in association with each of the modes, and
selectively rotates the driven gears by rotating the planetary gear on the axis
thereof."

Page 6

Application/Control Number: 10/084,415

Art Unit: 2626

Claim 17 is allowed for the reason the prior art does not teach or suggest, "... wherein the communication apparatus associates the driven gears with any of the executable operations, at least one of the driven gears to be used in each of the modes is predetermined, at least one position on the path of the planetary gear that is associated with the at least one of the driven gears, is selected with the regulating unit according to the modes to be executed as the sun gear is rotated in one direction, and the at least one of the driven gears associated with the at least one position that is selected, is driven by rotating the planetary gear on the axis thereof as the sun gear is rotated in an opposite direction, to selectively execute the modes."

5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Grant II whose telephone number is 571-272-7463. The examiner can normally be reached on Mon.- Thurs. from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore, can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J. Grant II